

**REMARKS**

Claims 1-5 and 7-20 are pending. Claim 6 is cancelled and claims 1 and 5 are amended. Claims 7, 12 and 16-20 stand withdrawn from further consideration as being directed to a non-elected invention.

Claim 6 was rejected under 35 U.S.C. § 112. The claims have been amended to provide proper antecedent basis.

Claims 1, 2, 5, 6 and 10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Davies et al. (U.S. Patent 6,084,269). Favorable reconsideration is respectfully requested.

Davies teaches the use of a well underneath the source and drain regions, and also teaches the feature that the bottom of the punch-through stopper is located in the vicinity of such well.

On the other hand, it is noted that, with Davies, the bottom edge of the drain extension regions (101) corresponding to the source and drain regions of the present invention is located close to the well, and thus, there exists a situation that the bottom of the punch-through stopper, located also close to the well, is formed at the level closer to the bottom edge of the source and drain regions (101) as compared with the top of the punch-through stopper.

Because the source and drain regions are formed close to the well with the structure of Davies, extension of the depletion layer from the bottom edge of the source and drain regions toward the bottom of the substrate is interrupted by the well, and there is formed a large parasitic capacitance at the bottom edge of the source and drain regions.

With the present invention, on the other hand, the depletion layer can extend over a large distance from the bottom edge of the source and drain regions (reference should be made to Fig. 12, for example), and thus, the parasitic capacitance at the bottom of the source and drain regions is minimized. Thereby, the device of the present invention shows improved operational speed over the device of Davies.

Claims 1-4 and 8-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka (U.S. Patent 6,479,356). This rejection has been rendered moot by the amendment of claim 1 to incorporate features of claim 6.

Applicants acknowledge the indication that claims 11 and 13-15 have been allowed. For the reasons discussed above, it is respectfully submitted that all claims are in condition for allowance.

Should the Examiner deem that any further action by applicants would be desirable to place to the application in condition for allowance, the Examiner is encouraged to telephone applicants' undersigned attorney.

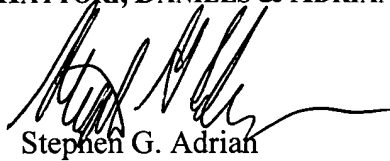
For at least the foregoing reasons, the claimed invention distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Amendment  
Serial No. 10/633,538  
Attorney Docket No. 030927

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

**WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP**

A handwritten signature in black ink, appearing to read 'Stephen G. Adrian', with a long horizontal flourish extending to the right.

Stephen G. Adrian  
Attorney for Applicants  
Registration No. 32,878  
Telephone: (202) 822-1100  
Facsimile: (202) 822-1111

SGA/AGM/meu